Serial No.:

10/665,167

Examiner:

Bot L. Ledynh

examiner:

Reply to Office Action of December 16, 2004

Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. (Original) A magnetic head and disk tester, comprising:

A. a base having a support assembly which rotatably supports a magnetic disk;

B. a movable carriage supported by said base, said carriage having a magnetic head

support for supporting a magnetic head with a magnetic read/write element, said magnetic head

support having a longitudinal axis; and

C. positioning means for moving said carriage with said magnetic head with respect

to said magnetic disk along two perpendicular motion axes X and Y, wherein said longitudinal

axis of the head and said X axis forms a predetermined angle between 0 degrees and 90 degrees.

2. (Original) A magnetic head and disk tester according to claim 1, wherein the predetermined

angle is about 45 degrees.

3. (Currently amended) A method of moving a magnetic read/write head across a magnetic disk

so that said head and disk can be tested electrically, said magnetic head being supported by a

magnetic head support which extends from a carriage, said magnetic head support having a

longitudinal axis, said method comprising:

rotationally supporting said disk on a stationary base;

installing said carriage onto a coordinate system, wherein said carriage is movable on

said coordinate system in a two perpendicular directions X and Y, and wherein said magnetic

head support and said magnetic head is positioned such that said longitudinal axis of said

magnetic head support forms a predetermined angle with respect to said X direction, wherein

said predetermined angle is between 0 degree and 90 degrees; and

driving said carriage in said two directions such that said magnetic head traverses across

said disk.

Serial No.: 10/665,167 Examiner: Bot L. Ledynh

Reply to Office Action of December 16, 2004

4. (Original) A method of moving a magnetic read/write head across a magnetic disk according to claim 3, wherein said predetermined angle is about 45 degrees.

5. (Currently amended) The A magnetic head and disk tester for placing a magnetic read/write head across a magnetic disk so that said head and disk can be tested electrically, said magnetic disk is rotatably supported by a spindle, said head and disk tester comprising:

a magnetic head support for supporting a magnetic head with a magnetic read/write element, said magnetic head support having a longitudinal axis; and

with an X-Y moving platform for supporting and moving said magnetic head support in two perpendicular directions X and Y, wherein said magnetic head support is mounted to said X-Y moving platform such that said longitudinal axis forms a predetermined angle with the X direction, wherein where the angle between the head longitudinal axis and the X direction -axis is between 0 degree and 90 degrees not equal to 90°, which introduces a tradeoff between X and Y movement ranges for the required range of skew angles. This tradeoff allows choosing long X-movements and short Y movements to avoid crashing the head or/and the head loader arm into the spindle hub.

- 6. (Currently amended) The magnetic head and disk tester of claim 5, wherein the tester further comprises where a V-shaped head loader is installed on the X-Y moving platform, wherein said magnetic head support is mounted on one side arm of said V-shaped head loader, and wherein said tester further comprises another magnetic head support for supporting another magnetic head, said another magnetic head support being mounted on the other side arm of said V-shaped head loader for top and bottom head testing on the same surface of the disk.
- 7. (Currently amended) The magnetic head and disk tester of claim 5 8, wherein where X and Y movement ranges of said magnetic head are limited ehosen in such a way that neither top nor bottom said head is not able to ean crash into the spindle hub.
- 8. (Currently amended) The magnetic head and disk tester of claim 5, wherein said test further comprises mechanical limiters, and wherein X and Y movements of said magnetic head are restricted limited by said mechanical limiters.

Serial No.:

10/665,167

Examiner:

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Reply to Office Action of December 16, 2004

- 9. (Currently amended) The magnetic head and disk tester of claim 6 5, wherein said tester further comprises a the head loader, wherein said head loader comprises two of said magnetic head support for placing two magnetic allows installing the heads at both surfaces of the disk. In this configuration the top head testing area can be used to test both top and bottom heads and the bottom head testing area can be used to test both bottom and top heads.
- 10. (Currently amended) The magnetic head and disk tester of claim 5, wherein the angle between the head-longitudinal axis of said magnetic head support and the X-axis is chosen in such a way that only X-movement-substantially no Y-movement of said magnetic head is used to achieve required skew angles.
- 11. (Currently amended) The magnetic head and disk tester of claim 5, wherein X-movement range of said magnetic head is wide enough to reach unload positions away from the disk without the possibility to crash the head or/and the head loader arm magnetic head support to into the spindle hub.